Amendments to the Specification

Please replace the third paragraph on page 17, lines 24-30 with the following amended paragraph:

During adsorption the main inlet (11)~~C~~ and outlet (12)~~D~~ are open with the VOC laden gas passing through the monolith channels from (11)~~C~~ to (12)~~D~~. The regeneration inlet, (10)~~(E)~~, and outlet, (9)~~(F)~~, are closed. Typical adsorption gas flows can range from 0.5L/min per parallel monolith pathway to 25L per parallel monolith pathway depending on the VOC concentration and the overall process design. In conventional adsorption systems, where the large beds have a high thermal capacity, it is necessary to go through an initial bed cooling stage in clean gas

Please replace the second paragraph on page 18, lines 9-26 with the following amended paragraph:

During regeneration, the main gas inlet (11)~~C~~ and outlet (12)~~(D)~~ are closed. The regeneration gas is now brought in through the regeneration gas inlet (10)~~(E)~~. With the required gas flow established the power is then switched on to the monolith array. Because of the monolithic structure of the adsorbent, this gas can then be passed along the reactor over the outer surface of the carbon monoliths. This heats the regeneration gas to the required regeneration temperature. The gas then enters the monolith internal channels via the monolith outlets and passes counter current to the original adsorption flow, exiting via the regeneration gas outlet (9)~~(F)~~. Because the monoliths are heated

electrically the regeneration gas is no longer required to bring heat into the system to raise the monoliths to the regeneration temperature as is the case in conventional systems. The regeneration flow can therefore be reduced to the minimum required to carry the desorbed VOC's out of the reactor to the collection system. this has the benefit of minimizing heat losses from the system in the regeneration gas although waste heat in the regeneration gas could also be beneficially recovered by a feed-effluent heat exchange system. The temperature in the entire array is controlled by a single thermocouple in the outlet zone of the reactor ~~(TC1)~~ with power being supplied to all banks simultaneously from a single power supply.

Please replace the first paragraph on page 20, lines 1-5 with the following amended paragraph:

Referring to fig. 11 two monolith beds (41) and (42) made of monolithic carbon beds are arranged as shown. An electric current can be applied across monolith (42) from (IV). Feed gas (F) comprising air contaminated with VOCs enters the top of monolith bed (41) and exits as VOC free air from the bottom (P~~43~~). Flow is stopped when the VOC concentration in the effluent air stream reaches the legal limit.

Please replace the first paragraph on page 22, lines 3-12 with the following amended paragraph:

In the adsorption cycle the feed gas passes to the top of the first monolith bed (41)~~(B1)~~ and from the monolith bed to the first granular bed (51)~~(G1)~~. In this operation (51)~~(G1)~~ is used to polish the effluent from (41)~~(B1)~~, allowing (41)~~(B1)~~ to approach equilibrium

uptake. At this stage reactor 2 (42~~B2~~ +52~~G2~~) is regenerating. The regenerant gas (RI) passes through the feed effluent heat exchanger (43)~~(H)~~, preheating the inlet gas to the granular bed (52~~G2~~). As this gas is clean the temperature required to regenerate (52~~G2~~) is minimized. The regenerant gas passes direct to (B2) and then to the heat exchanger (43~~H~~). Cooled effluent gas passes to the cooling system where liquid is recovered and the VOC saturated effluent passes back to the feed to (R1).

Please replace the second paragraph on page 22, lines 16-17 with the following amended paragraph:

In cycle 2 the roles of the beds are simply reversed with (42~~B2~~) now the adsorber and (42~~B1~~) regenerating.

Please replace the first paragraph on page 24, lines 1-8 with the following amended paragraph:

stream, after heat exchange to reduce the temperature (64e2), is then taken to the VOC recovery unit. Because of the low gas flows and the high VOC concentrations we have found that very limited cooling is required which under some circumstances may only be cooling water. The VOC's are recovered from the cooling system as a liquid (L). The gas stream from the cooler (E#), which is still saturated with VOC'S, is returned to the feed inlet stream (E3) to bed (61). Because the regeneration gas flow is so low this can be added into the much higher feed flow without significantly increasing the load the adsorbers.